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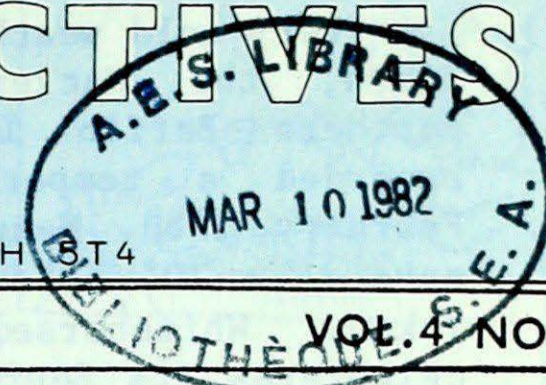
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A WEEKLY REVIEW OF CANADIAN CLIMATE

CLIMATIC PERSPECTIVES

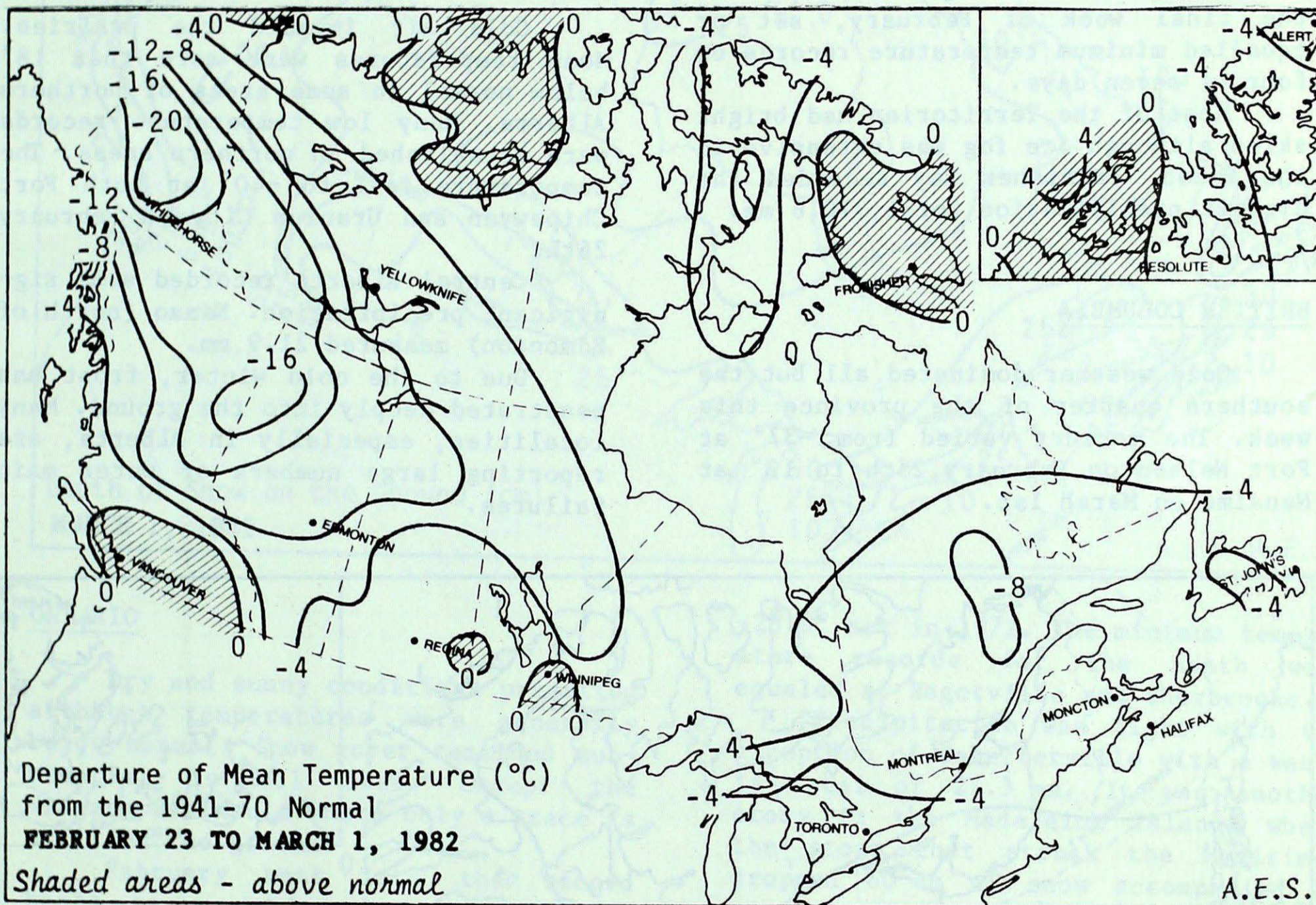
Canada

THE CANADIAN CLIMATE CENTRE,
ATMOSPHERIC ENVIRONMENT SERVICE,
4905 DUFFERIN ST., DOWNSVIEW, ONTARIO M3H 5T4



MARCH 5, 1982

(Aussi disponible en français)



WEATHER HIGHLIGHTS FOR THE PERIOD - FEBRUARY 23 TO MARCH 1, 1982

Storms strike the Atlantic Provinces for third consecutive week

A storm following almost the same track as the storm which sank the Ocean Ranger buffeted many areas with winds of over 100 km/h. The areas hardest hit were Prince Edward Island, the Madeleine Islands and western Newfoundland. Snowdrifts of 5 m to 7 m in height brought western Prince Edward Island to a standstill as even the snowploughs were forced out of service.

The Madeline Islands were paralysed by 60 cm of snow accompanied by winds of over 100 km/h. More than 6000 people were left without heat or telephone service.

Temperatures varied from a maximum of 13° at Nanaimo, B.C. to a minimum of -49° at Pond Inlet, N.W.T. Amphitrite Point, B.C. recorded the highest weekly precipitation total, 243.9 mm.

NOTE: The data shown in this publication are based on unverified reports from approximately 225 Canadian and 115 northern United States Synoptic stations.

YUKON AND NORTHWEST TERRITORIES

Very cold weather was general over Yukon, the Mackenzie District and northern Baffin Island. Pond Inlet recorded a temperature of -49° on February 27th. Mean temperatures were more than 20° below normal in central Yukon. Whitehorse, which annually celebrates its Sourdough Rendezvous in the final week of February, set or equalled minimum temperature records on four of seven days.

Most of the Territories had bright skies although ice fog was extensive in the Yukon. Frobisher Bay recorded the highest precipitation total, 10.6 mm.

BRITISH COLUMBIA

Cold weather dominated all but the southern quarter of the province this week. The mercury varied from -37° at Fort Nelson on February 25th to 13° at Nanaimo on March 1st.

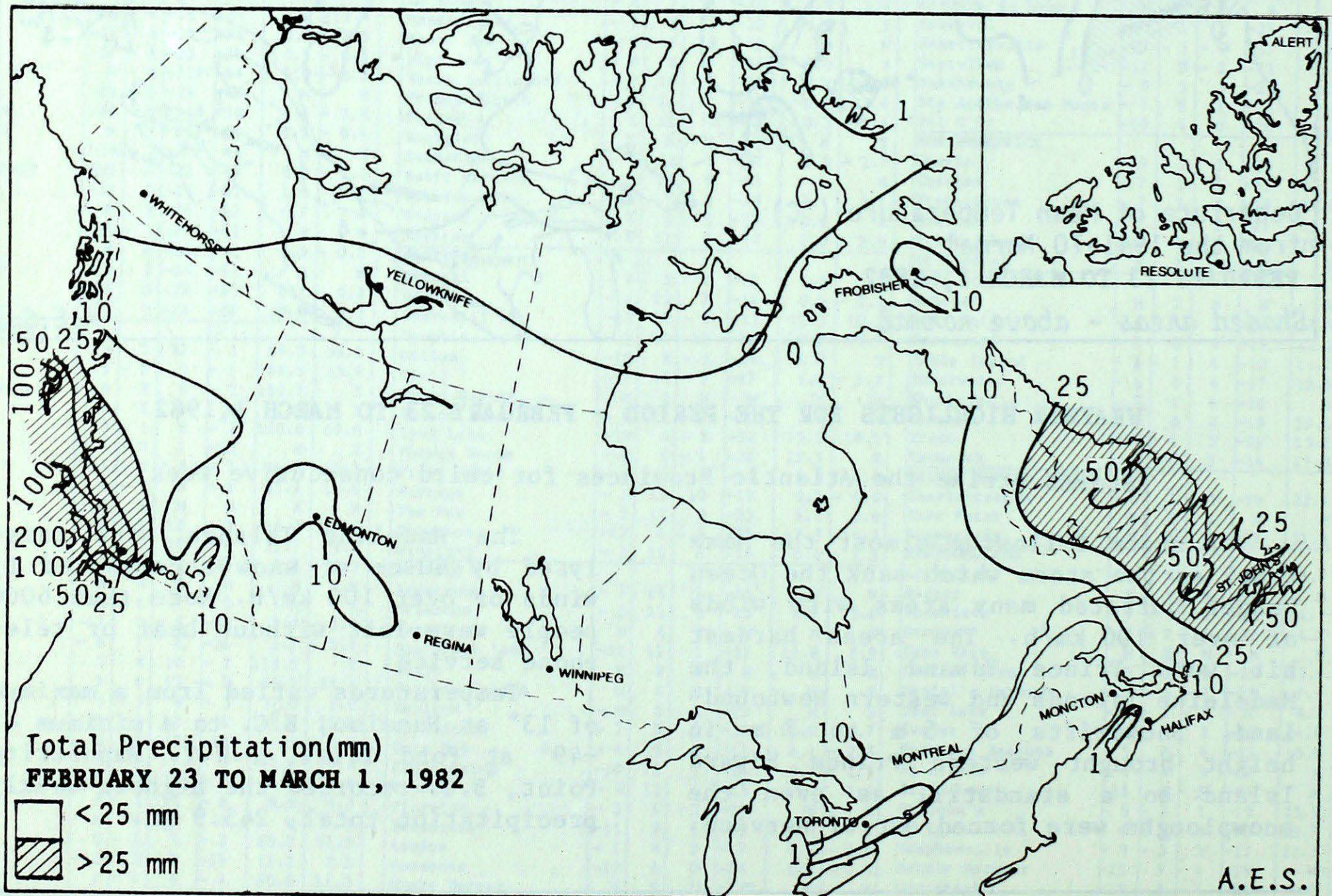
Coastal precipitation was again very high. Amphitrite Point measured 243.9 mm, the third week in which the precipitation total was in excess of 160 mm.

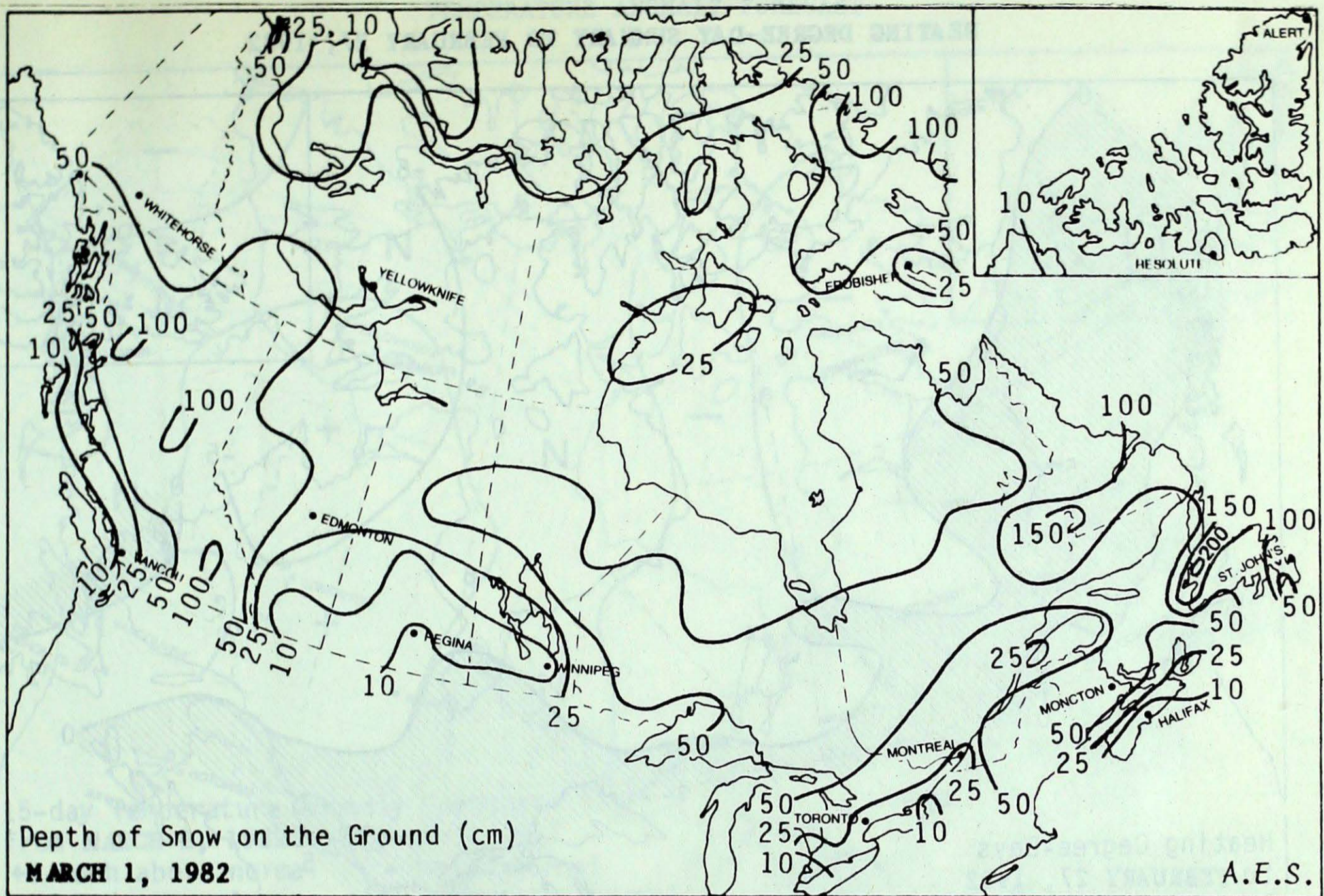
PRAIRIE PROVINCES

Cold air invaded the prairies. Mean temperatures were more than 18° below normal in some areas of northern Alberta. Many low temperature records were established in northern areas. The temperature fell to -40° at both Fort Chipewyan and Uranium City on February 26th.

Central Alberta recorded some significant precipitation. Nampa (north of Edmonton) measured 21.9 mm.

Due to the cold winter, frost has penetrated deeply into the ground. Many localities, especially in Alberta, are reporting large numbers of water main failures.





ONTARIO

Dry and sunny conditions prevailed although temperatures were generally below normal. Snow cover remained substantial in all areas except the Niagara Peninsula where only a trace is still on the ground.

February went into the record books as a cold and relatively dry month. Although snowfalls were generally significant, there was almost a complete absence of rain causing total precipitation amounts to be much below normal.

For the winter season to date, Toronto has received 123 cm of snow, only 14 cm more than that of a normal winter to the end of February.

QUEBEC

The cold weather covering Québec this week set 35 daily temperature records. The minimum of -31° registered at Roberval on March 1st eclipsed the old record monthly minimum of

-28.9° set in 1972. The minimum temperature records for the month were equaled at Bagotville and Sherbrooke.

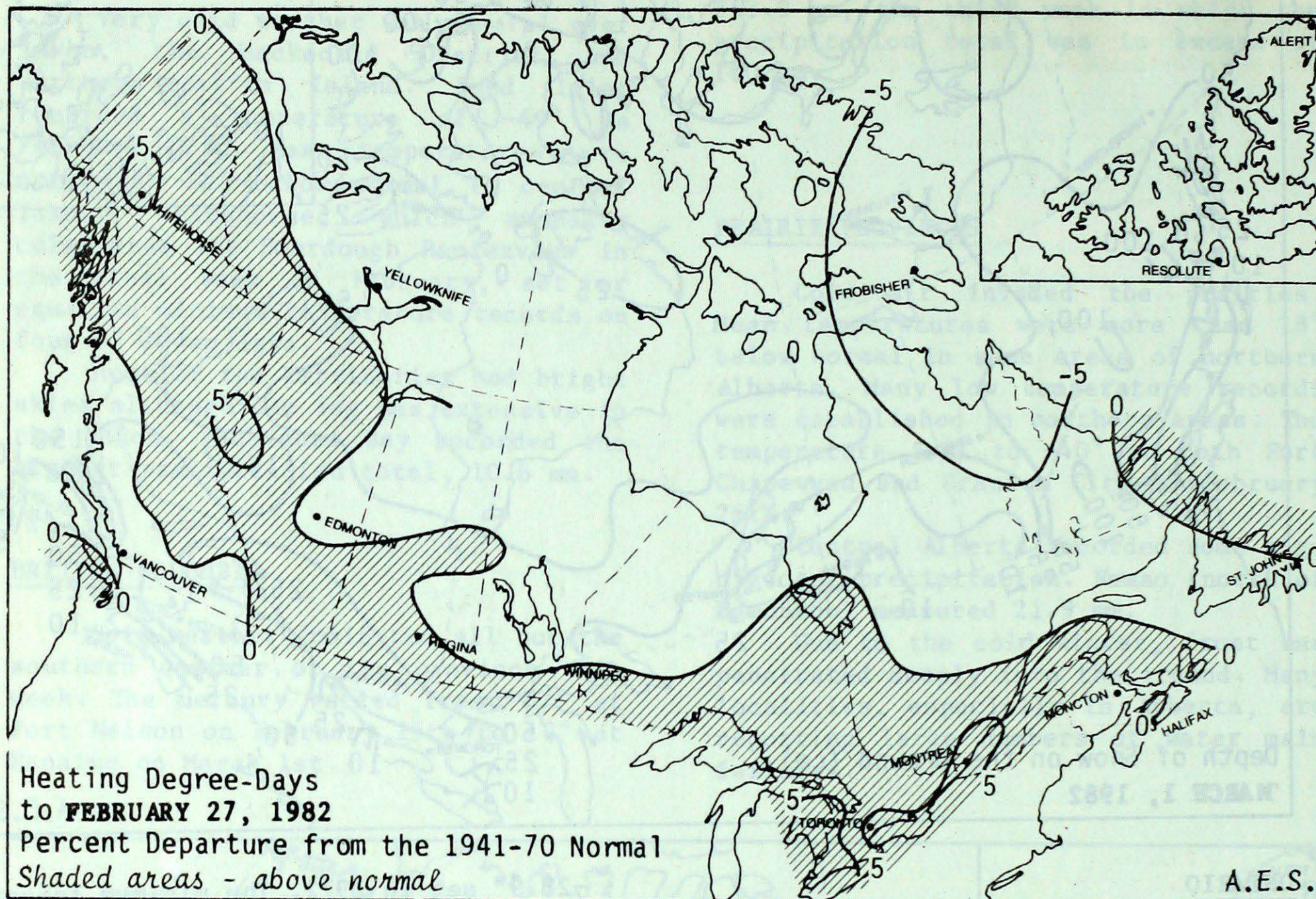
Precipitation was light with the exception of Schefferville with a weekly total of 21.3 mm. It was another story in the Madeleine Islands where the storm that struck the Maritimes dropped 60 cm of snow accompanied by winds exceeding 100 km/h. The storm completely paralysed the Islands. More than 6000 people were left without heat or telephone service and an emergency supply of food and supplies was desperately needed.

ATLANTIC PROVINCES

The Atlantic Provinces were struck by a major storm which followed almost the same track as the storm that sank the Ocean Ranger. Wind gusts of 130 km/h were measured along the Newfoundland coast. The troller Dolores Genda sank 160 km northeast of Cartwright on February 24th, but all crew members were rescued.

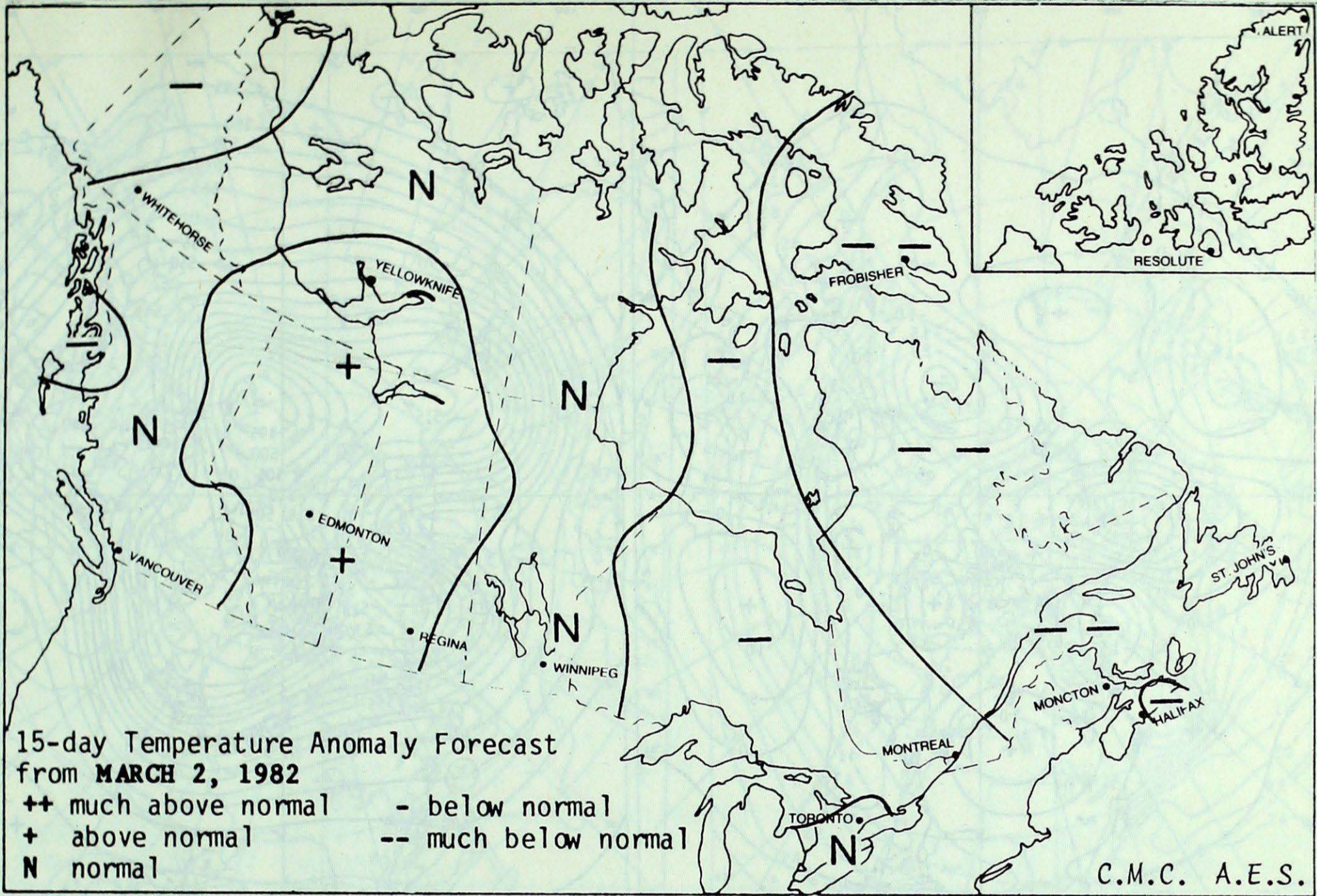
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HEATING DEGREE-DAY SUMMARY TO FEBRUARY 27, 1982

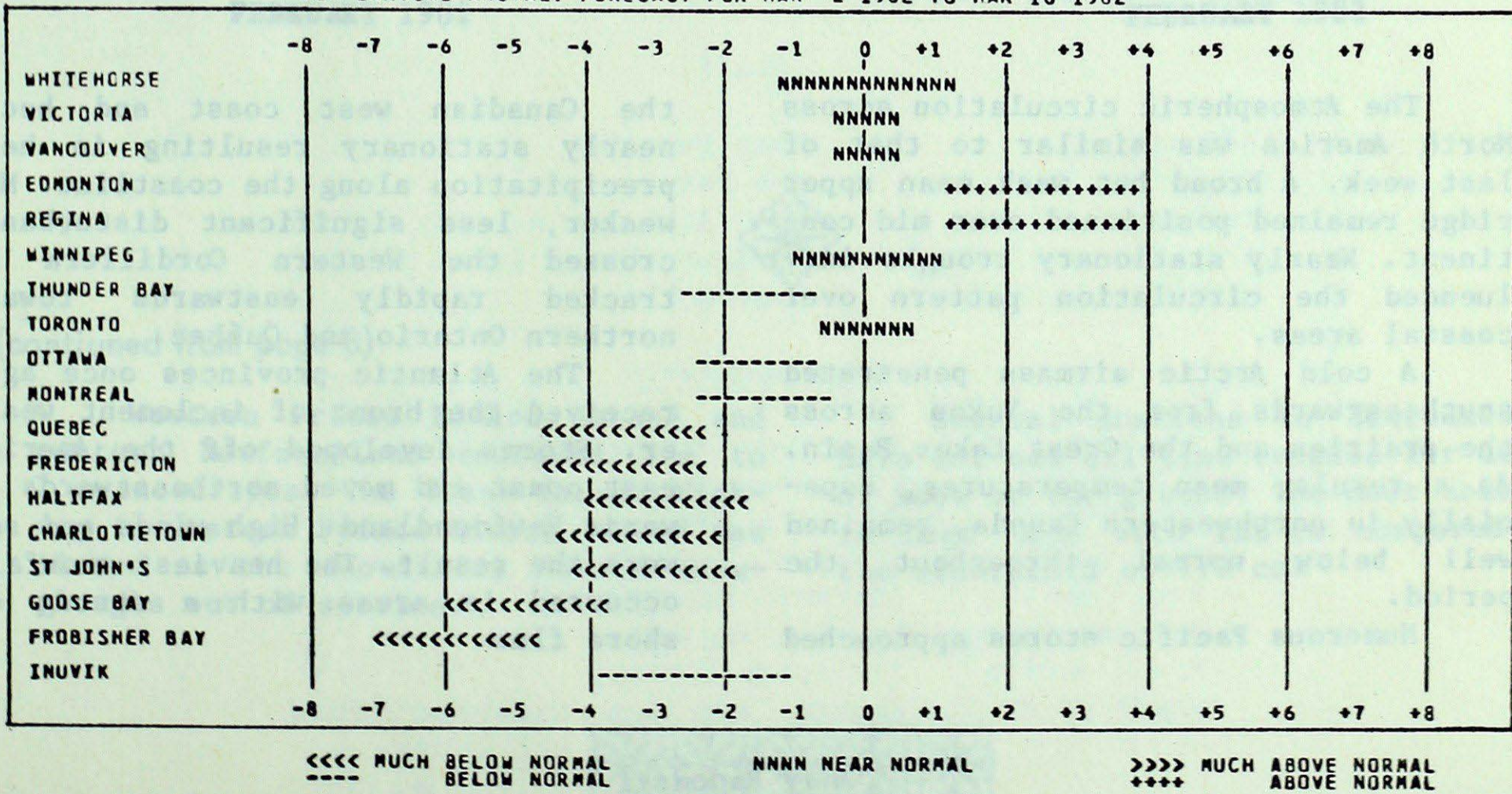


STATION	MONTHLY CUMULATIVE TOTAL	MONTHLY DIFF. FROM 1941-70 NORMAL	SEASONAL TOTAL	SEASONAL DIFF. FROM 1941-70 NORMAL	SEASONAL PERCENT OF NORMAL
Resolute	1395.0	-10.0	7930.5	-370.5	96
Inuvik	1132.5	-159.5	6806.0	-209.0	97
Whitehorse	963.0	111.0	5348.5	348.5	107
Vancouver	376.0	6.0	2041.0	-45.0	98
Edmonton Mun	855.5	77.5	4048.0	-34.0	99
Calgary	784.0	89.0	3920.5	148.5	104
Regina	966.5	12.5	4762.0	-11.0	100
Winnipeg	883.5	-37.5	4285.0	-9.0	100
Thunder Bay	870.5	22.5	4193.5	126.5	103
Windsor	666.0	80.0	2856.0	271.0	110
Toronto	689.5	41.5	3154.5	265.5	109
Ottawa	734.5	-16.5	3531.5	135.5	104
Montreal	736.5	3.5	3482.0	246.0	108
Quebec	799.0	15.0	3781.0	168.0	105
Saint John, N.B.	710.5	13.5	3329.0	90.0	103
Halifax	616.0	9.0	2757.5	67.5	103
Charlottetown	703.5	13.5	3083.5	29.5	101
St. John's, Nfld.	670.5	62.5	3027.5	1.5	100

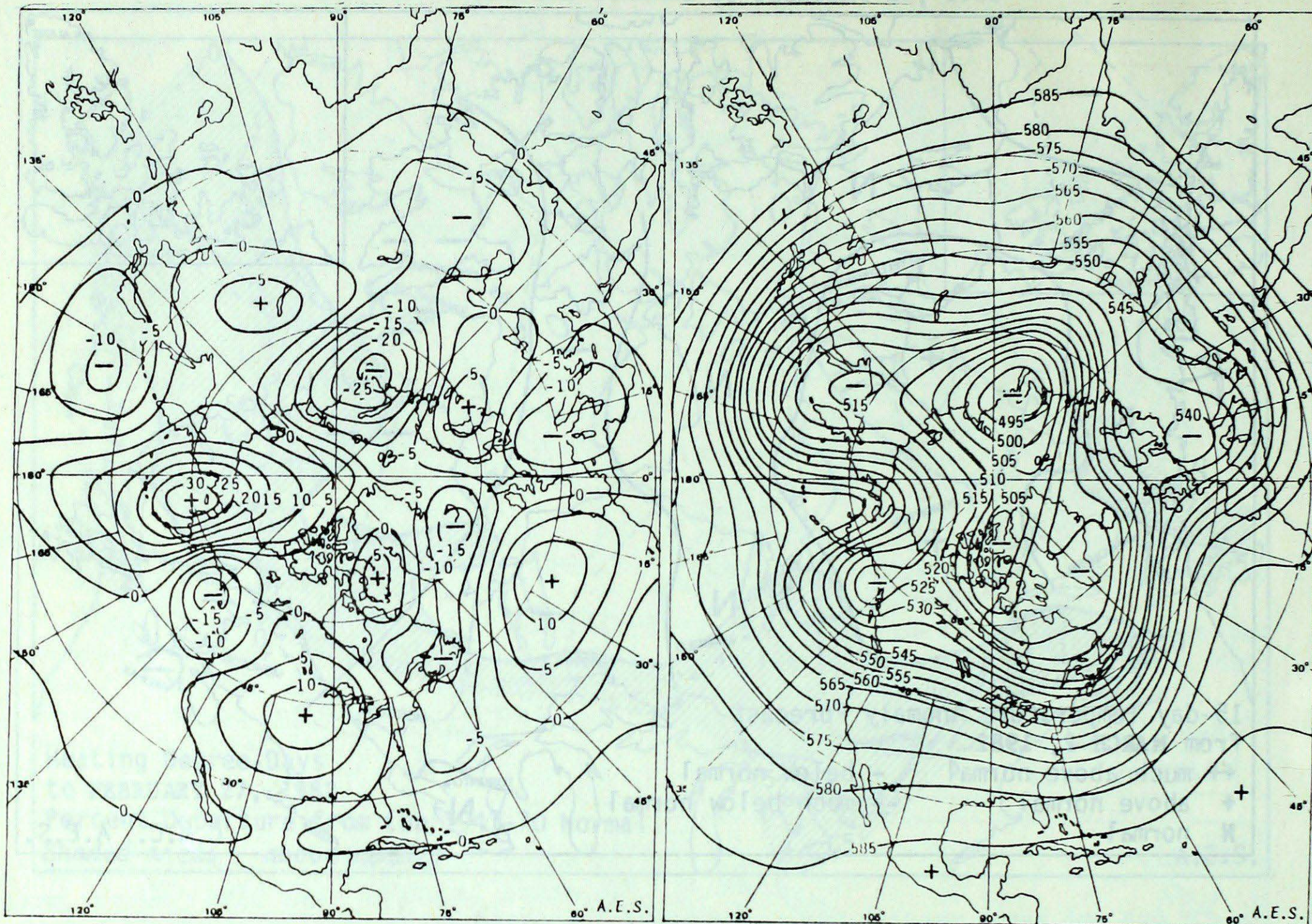
TEMPERATURE ANOMALY FORECAST



TEMPERATURE ANOMALY FORECAST FOR MAR 2 1982 TO MAR 16 1982



Atmospheric Circulation



7-day Mean 50 kPa Height Anomaly
(5 dam intervals)

FEBRUARY 22 TO 28, 1982

7-day Mean 50 kPa Height (dam)

FEBRUARY 22 TO 28, 1982

The Atmospheric circulation across North America was similar to that of last week. A broad but weak mean upper ridge remained positioned over mid continent. Nearly stationary troughs influenced the circulation pattern over coastal areas.

A cold Arctic airmass penetrated southeastwards from the Yukon across the prairies and the Great Lakes Basin. As a result, mean temperatures, especially in northwestern Canada, remained well below normal throughout the period.

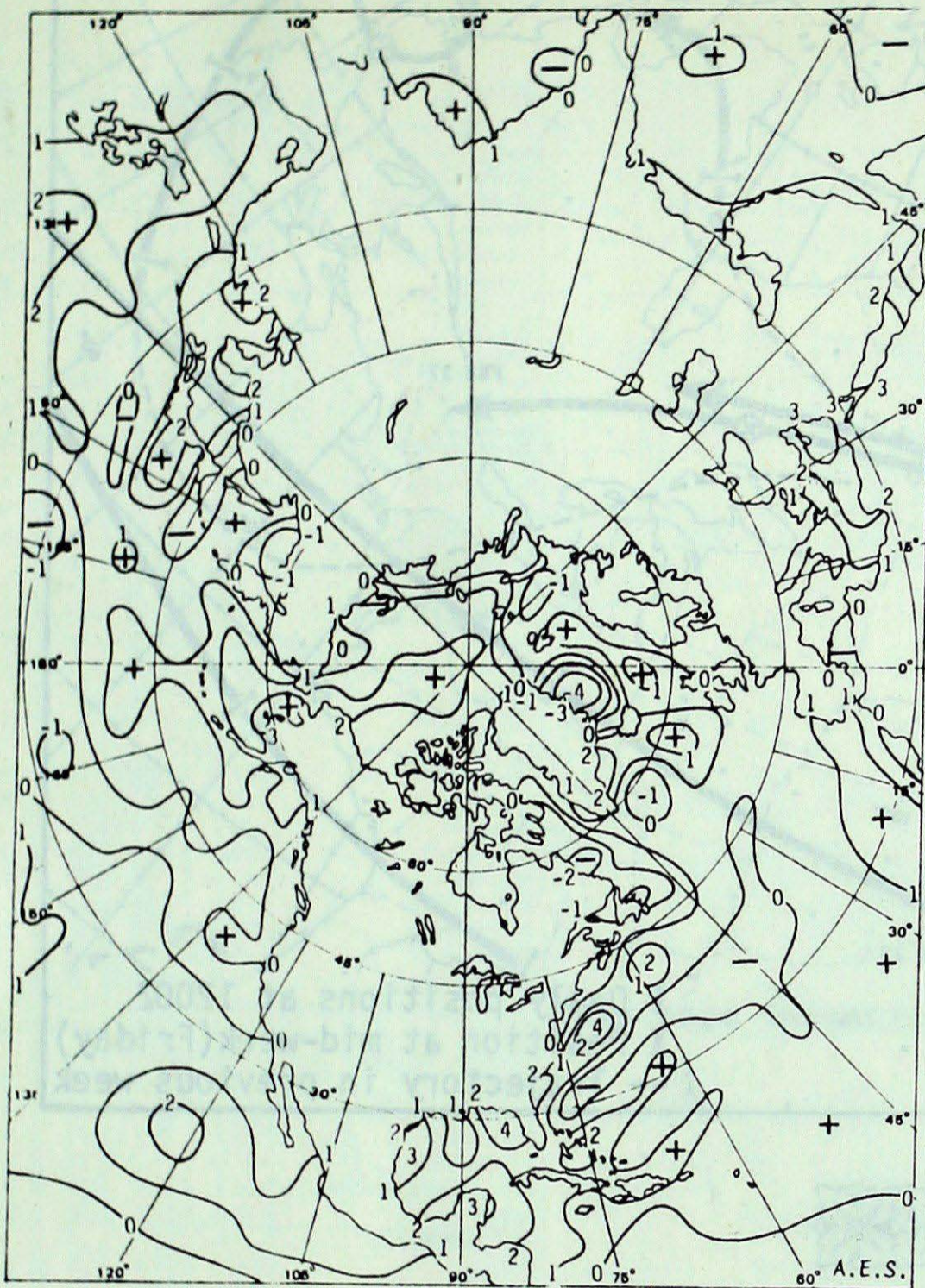
Numerous Pacific storms approached

the Canadian west coast and became nearly stationary resulting in heavy precipitation along the coastline. Much weaker, less significant disturbances crossed the Western Cordillera and tracked rapidly eastwards towards northern Ontario and Québec.

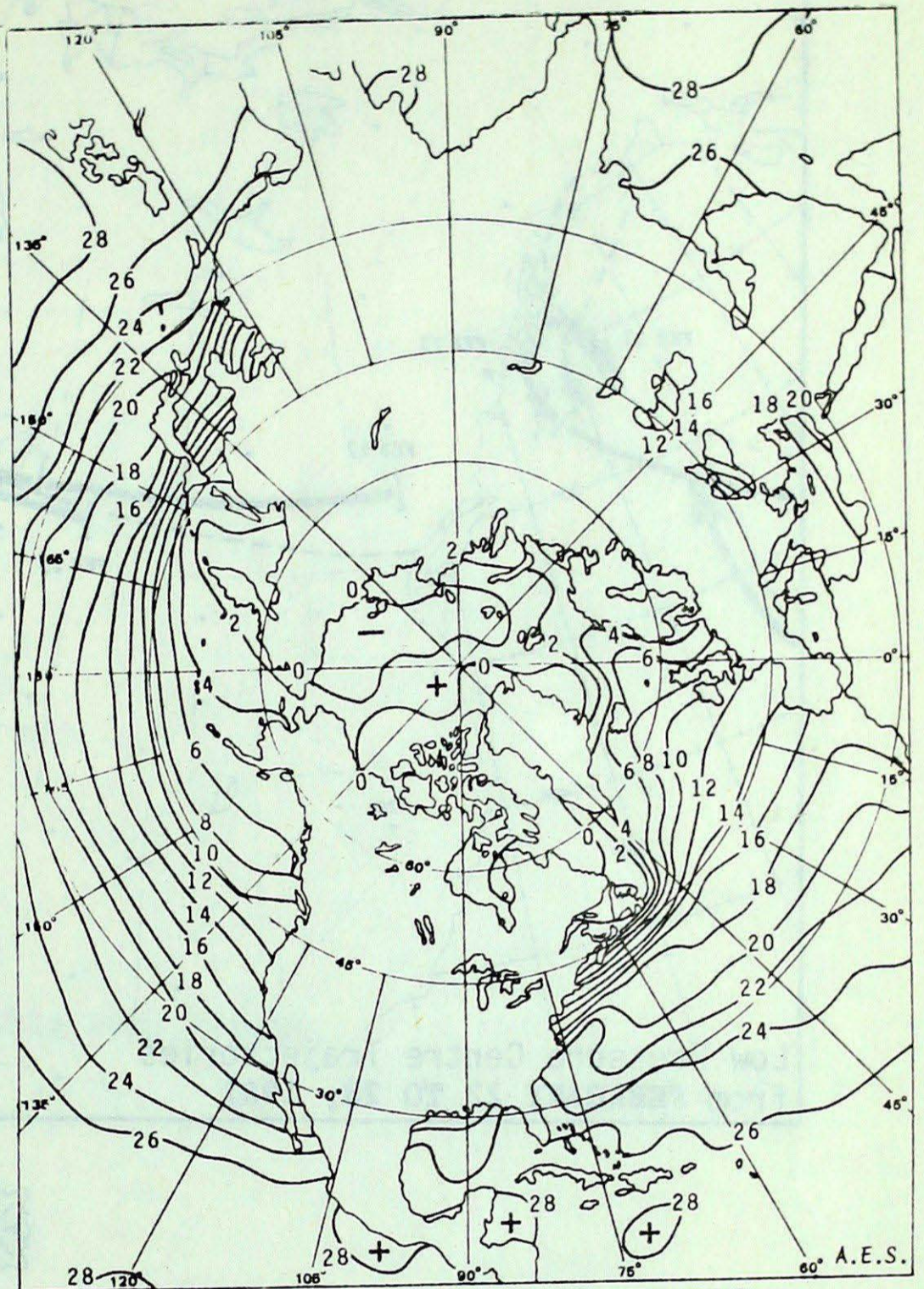
The Atlantic provinces once again received the brunt of inclement weather. Storms developed off the American east coast and moved northeastwards towards Newfoundland. High winds and snow were the result. The heaviest snowfalls occurred in areas with a strong on-shore flow.

Andy Radomski

SEA SURFACE TEMPERATURE



Sea Surface Temperature Anomaly
FEBRUARY 1982



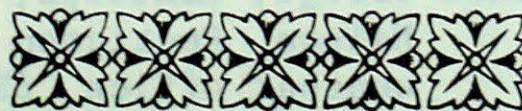
Mean Sea Surface Temperature
FEBRUARY 1982



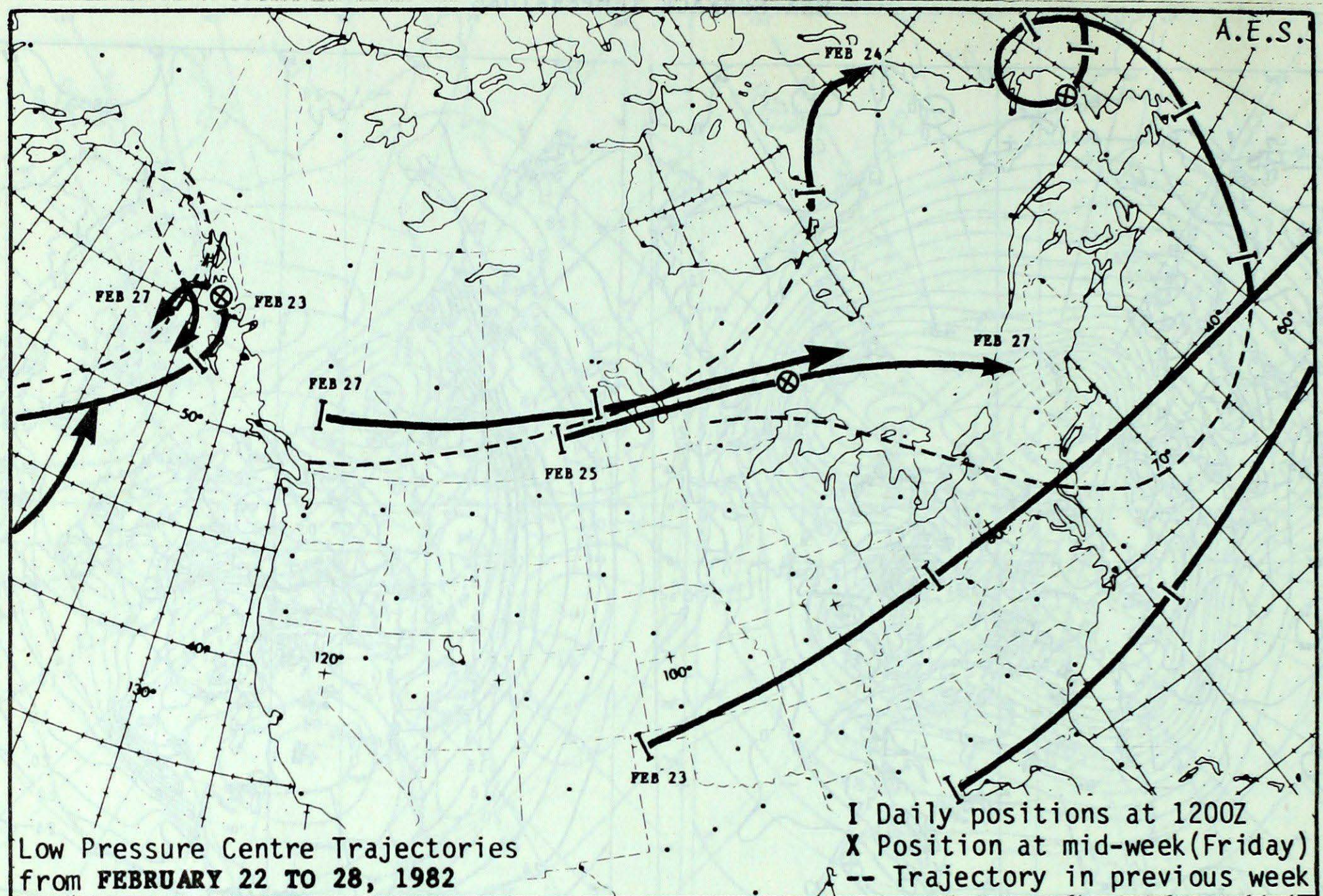
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Western Prince Edward Island and western Newfoundland recorded 5 m to 7 m snowdrifts. The Trans Canada Highway in western Prince Edward Island was closed as the snowdrifts forced snowploughs out of service.

Several stations in Newfoundland have set new all time records for depth of snow on the ground. The most notable is Deer Lake with 228 cm compared to the old record of 173 cm.



LOW PRESSURE CENTRE TRAJECTORIES



CLIMATIC PERSPECTIVES

Staff

Editor:	Yves Durocher
Assistant Editor:	Bob Paterson
Technical Staff:	Fred Richardson, Andy Radomski
Graphics and Layout:	J. Rautenberg, Lubna Malik
Word Processing:	Naseem Khaja

Correspondents

Terry Mullane,	(Ice Forecasting Central)
H.E. Wahl,	(Whitehorse)
Bill Prusak,	(Western Region)
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Telephone Inquiries (416) 667-4711/4906

ATLANTA RESOURCES

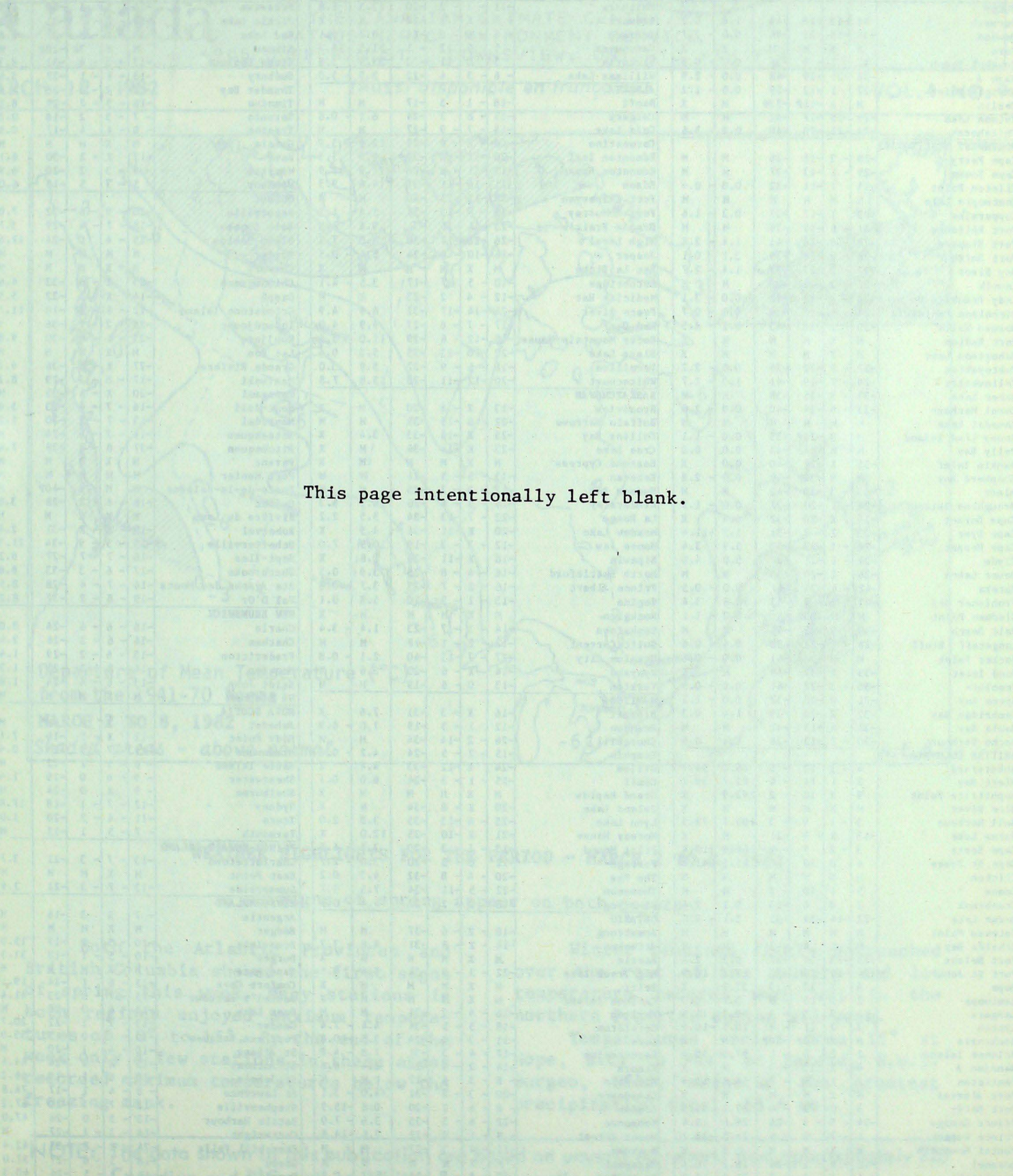
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Department of Mean Temperature

from the 1941-70 Base

MARCH 2 TO 8, 1962

Shaded areas - 400000



NOTE: Data shown

is for Atlanta

and is not

representative

TEMPERATURE AND PRECIPITATION DATA FOR THE WEEK ENDING 0600 G.M.T. MARCH 2, 1931

Table with columns: Station, Temperature (°C) (Average, Departure from Normal, Extreme Maximum, Extreme Minimum), Precip. (mm) (Total, Departure from Normal). Rows include Yukon, Northwest Territories, and British Columbia stations.

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Table with columns: Station, Temperature (°C) (Average, Departure from Normal, Extreme Maximum, Extreme Minimum), Precip. (mm) (Total, Departure from Normal). Rows include Petawawa, Québec, New Brunswick, Nova Scotia, and Newfoundland stations.

P - extreme value based on less than 7 days X - no normal due to short period M - not available at present time